



Jefferson Lab Alignment Group

Data Transmittal

TO: Jay Benesch

DATE: 26 Apr 2006

FROM: Chris Curtis

Checked:

: L1055

DETAILS:

data: m:\align\data\step2a\inj\060112a
data: m:\align\data\step2b\inj\060111a

Below are the results of the location survey of harps in injector / 45 Mev region of the accelerator. The Z value for IHA1106 was taken from taped distances published in Transmittal # 847. This should be assumed to be at +/- 5mm accuracy. Harp 0L03 was measured relative to the survey monuments, so the DX and DY relative to the ideal location is shown. DZ is given relative to the as found location of QJ0L03A which differs significantly from the ideal. The remaining components were measured in a local system (i.e. relative to the nearest quad, listed bold) only a DZ is given, together with a derived Z coordinate. DZ and DS (distance along beam) are the same at this location. The ideal coordinates of the quads are shown in meters in the machine system with the center of the accelerator at Z=0, X= 0 and Y=100. The DZ and DS are given in millimeters, with a positive DZ/DS being downstream. Accuracy is estimated at +/- 1mm.

Component	Z (m)	X (m)	Y (m)	Comment	DZ (mm)	DX (mm)	DY (mm)
IHA1106	-258.873			<i>DTM 847</i>			
QJ0L03A ctr	-238.5860	80.6000	100.0000	<i>Ideal</i>			
QJ0L03A ctr	-238.5906	80.6000	100.0004	<i>As Found</i>			
HA0L03 ctr	-238.3582				232.4	-1.0	0.7
QD0L07	-210.3815	80.6000	100.0000	<i>Ideal</i>			
HA0L07 ctr	-210.1480				233.5	**	**
QD0L08	-204.2740	80.6000	100.0000	<i>Ideal</i>			
HA0L08 ctr	-204.0430				231.0	**	**
QD0L09	-198.1665	80.6000	100.0000	<i>Ideal</i>			
HA0L09 ctr	-197.9341				232.4	**	**
QD0L10	-192.0590	80.6000	100.0000	<i>Ideal</i>			
HA0L10 ctr	-191.0620				997.0	**	**
QD0R04	-172.1368	81.6035	100.0000	<i>Ideal</i>			
HA0R04 ctr	-172.9982				-861.4	**	**